

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
 Appl. No.: 09/548,998
 Title: Nucleic Acid Fragments for the
 Identification of Dechlorinating Bacteria
 Inventor: Ebersole et al.

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The *Dehalococcoides* sp. alignment

DHE seq alignments1.msf MSF: 1223

Name: DHE.(cornell)
 Name: DHE (stf).seq
 Name: DHE.(pl).seq
 Name: DHE.(dll).seq
 Name: DHE.(dab).seq
 Name: DHE.(pin).seq

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 //

1	DHE. (cornell)	GATGAACGCTAGCGGCGTGCCCTTATGCAAGTCGAA	CGGTCCTTAAGCAATTAAAGATA	60
	DHE (stf).seq	GATGAACGCTAGCGGCGTGCCCTTATGCAAGTCGAA	CGGTCCTTAAGCAATTAAAGATA	
	DHE. (pl).seq	GATGAACGCTAGCGGCGTGCCCTTATGCAAGTCGAA	CGGTCCTTAAGCAATTAAAGATA	
	DHE. (dll).seq	GATGAACGCTAGCGGCGTGCCCTTATGCAAGTCGAA	CGGTCCTTAAGCAATTAAAGATA	
	DHE. (dab).seq	GATGAACGCTAGCGGCGTGCCCTTATGCAAGTCGAA	CGGTCCTTAAGCAATTAAAGATA	
	DHE. (pin).seq	GATGAACGCTAGCGGCGTGCCCTTATGCAAGTCGAA	CGGTCCTTAAGCAATTAAAGATA	
61	DHE. (cornell)	GTGGCAAAACGGGTGAGTAAACGGGTAAAGTAACTAC	CCTCTAAGTGGGGGATAGCTTCGGGA	120
	DHE (stf).seq	GTGGCAAAACGGGTGAGTAAACGGGTAAAGTAACTAC	CCTCTAAGTGGGGGATAGCTTCGGGA	
	DHE. (pl).seq	GTGGCAAAACGGGTGAGTAAACGGGTAAAGTAACTAC	CCTCTAAGTGGGGGATAGCTTCGGGA	
	DHE. (dll).seq	GTGGCAAAACGGGTGAGTAAACGGGTAAAGTAACTAC	CCTCTAAGTGGGGGATAGCTTCGGGA	
	DHE. (dab).seq	GTGGCAAAACGGGTGAGTAAACGGGTAAAGTAACTAC	CCTCTAAGTGGGGGATAGCTTCGGGA	
	DHE. (pin).seq	GTGGCAAAACGGGTGAGTAAACGGGTAAAGTAACTAC	CCTCTAAGTGGGGGATAGCTTCGGGA	

FIG. 1A

APPROVED	O.G. FIG.	
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<p>121</p> <p>DHE. (cornell)</p> <p>DHE (stf) .seq</p> <p>DHE. (pl) .seq</p> <p>DHE. (dll) .seq</p> <p>DHE. (dab) .seq</p> <p>DHE. (pin) .seq</p>	<p>180</p> <p>AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTTAAAGCCGCAAGG</p> <p>AACTGAAGGTAATACCGCATGTGGTGGCCGACATAAGTTGGTTCACTAAAGCCGTAAGG</p> <p>AACTGAAGGTAATACCGCATGTGATGGGCTGACATAAGTCGGTTCACTTAAAGCCGCAAGG</p> <p>AACTGAAGGTAATACCGCATGTGGTGGCCGACATAAGTTGGTTCACTTAAAGCCGTAAGG</p> <p>AACTGAAGGTAATACCGCATGTGGTGGCCGACATAAGTTGGTTCACTTAAAGCCGTAAGG</p> <p>AACTGAAGGTAATACCGCATGTGGTGGCCGACATAAGTTGGTTCACTTAAAGCCGTAAGG</p> <p>AACTGAAGGTAATACCGCATGTGGTGGCCGACATAAGTTGGTTCACTTAAAGCCGTAAGG</p>
<p>181</p> <p>DHE. (cornell)</p> <p>DHE (stf) .seq</p> <p>DHE. (pl) .seq</p> <p>DHE. (dll) .seq</p> <p>DHE. (dab) .seq</p> <p>DHE. (pin) .seq</p>	<p>240</p> <p>TGCTTGGTGAGGGGCTTGGTCCGATTAGCTAGTTGGTGGGTAATGGTCTACCAAGGCT</p> <p>TGCTTGGTGAGGGGCTTGGTCCGATTAGCTAGTTGGTGGGTAACGGCCTACCAAGGCT</p> <p>TGCTTGGTGAGGGGCTTGGTCCGATTAGCTAGTTGGTGGGTAATGGCCTACCAAGGCT</p> <p>TGCTTGGTGAGGGGCTTGGTCCGATTAGCTAGTTGGTGGGTAACGGCCTACCAAGGCT</p> <p>CGCTTGGTGAGGGGCTTGGTCCGATTAGCTAGTTGGTGGGTAATGGCCTACCAAGGCT</p> <p>CGCTTGGTGAGGGGCTTGGTCCGATTAGCTAGTTGGTGGGTAATGGCCTACCAAGGCT</p>
<p>241</p> <p>DHE. (cornell)</p> <p>DHE (stf) .seq</p> <p>DHE. (pl) .seq</p> <p>DHE. (dll) .seq</p> <p>DHE. (dab) .seq</p> <p>DHE. (pin) .seq</p>	<p>300</p> <p>TCGATCGGTAGCT. GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG</p> <p>TCGATCGGTAGCTTGGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG</p> <p>TCGATCGGTAGCT. GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG</p> <p>TCGATCGGTAGCT. GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG</p> <p>TCGATCGGTAGCT. GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG</p> <p>TCGATCGGTAGCT. GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG</p> <p>TCGATCGGTAGCT. GGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAG</p>

FIG. 1B

APPROVED	O.G. FIG.	
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301
 DHE. (cornell) ACTCCTACGGGAGGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE (stf).seq ACTCCTACGGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE. (pl).seq ACTCCTACGGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE. (dll).seq ACTCCTACGGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE. (dab).seq ACTCCTACGGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA
 DHE. (pin).seq ACTCCTACGGGAGGCAGCAGCAAGGAATCTTGGGCAATGGGCGAAAGCCTGACCCAGCAA

361
 DHE. (cornell) CGCCGCGTGAGGGATGAAGGCTTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAATAATG
 DHE (stf).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAATAATG
 DHE. (pl).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAATAATG
 DHE. (dll).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAATAATG
 DHE. (dab).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAATAATG
 DHE. (pin).seq CGCCGCGTGAGGGATGAAGGCTTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAATAATG

421
 DHE. (cornell) ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGG
 DHE (stf).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGG
 DHE. (pl).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGG
 DHE. (dll).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGG
 DHE. (dab).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGG
 DHE. (pin).seq ACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGG

FIG. 1C

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540
DHE. (cornell) GAAGCAAGCGTTATCCGGATTATTGGCGTAAAGTAGCGTAGGTGGTCTTTCAAGTTG
DHE (stf).seq .AAGCAAGCGTTATCCGGATTATTGGCGTAAAGTAGCGTAGGTGGTCTTTCAAGTTG
DHE. (pl ).seq .AAGCAAGCGTTATCCGGATTATTGGCGTAAAGTAGCGTAGGTGGTCTTTCAAGTTG
DHE. (dll).seq .AAGCAAGCGTTATCCGGATTATTGGCGTAAAGTAGCGTAGGTGGTCTTTCAAGTTG
DHE. (dab).seq .AAGCAAGCGTTATCCGGATTATTGGCGTAAAGTAGCGTAGGTGGTCTTTCAAGTTG
DHE. (pin).seq .AAGCAAGCGTTATCCGGATTATTGGCGTAAAGTAGCGTAGGTGGTCTTTCAAGTTG

541
DHE. (cornell) GATGTGAAATTTCCCGGCTTAACCGGACGTCGTCAATCAATACTGTTGGACTAGAGTACA
DHE (stf).seq GATGTGAAATTTCCCGGCTTAACCGGACGTCGTCAATCAATACTGTTGGACTAGAGTACA
DHE. (pl ).seq GATGTGAAATTTCCCGGCTTAACCGGACGTCGTCAATCAATACTGTTGGACTAGAGTACA
DHE. (dll).seq GATGTGAAATTTCCCGGCTTAACCGGACGTCGTCAATCAATACTGTTGGACTAGAGTACA
DHE. (dab).seq GATGTGAAATTTCCCGGCTTAACCGGACGTCGTCAATCAATACTGTTGGACTAGAGTACA
DHE. (pin).seq GATGTGAAATTTCCCGGCTTAACCGGACGTCGTCAATCAATACTGTTGGACTAGAGTACA

600
DHE. (cornell) GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE (stf).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE. (pl ).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE. (dll).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE. (dab).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE. (pin).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC

601
DHE. (cornell) GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE (stf).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE. (pl ).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE. (dll).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE. (dab).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC
DHE. (pin).seq GCAGGAGAAAAACGGAATTCCTCGGTGTAGTGGTAAATGCGTAGATATCGGGAGGAACACC

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FIG. 1D

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661 720
 DHE. (cornell) AGAGCGAAGGCGGTTTTCTAGGTTGTCACTGACACCTGAGGCTCGAAAGCGTGGGAGCG
 DHE (stf).seq AGAGCGAAGGCGGTTTTCTAGGTTGTCACTGACACCTGAGGCTCGAAAGCGTGGGAGCG
 DHE. (pl).seq AGAGCGAAGGCGGTTTTCTAGGTTGTCACTGACACCTGAGGCTCGAAAGCGTGGGAGCG
 DHE. (dll).seq AGAGCGAAGGCGGTTTTCTAGGTTGTCACTGACACCTGAGGCTCGAAAGCGTGGGAGCG
 DHE. (dab).seq AGAGCGAAGGCGGTTTTCTAGGTTGTCACTGACACCTGAGGCTCGAAAGCGTGGGAGCG
 DHE. (pin).seq AGAGCGAAGGCGGTTTTCTAGGTTGTCACTGACACCTGAGGCTCGAAAGCGTGGGAGCG

721 780
 DHE. (cornell) AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATAGGGAGT
 DHE (stf).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATAGGGAGT
 DHE. (pl).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATAGGGAGT
 DHE. (dll).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATAGGGAGT
 DHE. (dab).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATAGGGAGT
 DHE. (pin).seq AACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATAGGGAGT

781 840
 DHE. (cornell) ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCTGGGGAGTACGGTCGC
 DHE (stf).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCTGGGGAGTACGGTCGC
 DHE. (pl).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCTGGGGAGTACGGTCGC
 DHE. (dll).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCTGGGGAGTACGGTCGC
 DHE. (dab).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCTGGGGAGTACGGTCGC
 DHE. (pin).seq ATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCTGGGGAGTACGGTCGC

FIG. 1E

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841	DHE. (cornell)	900	AAGGCTAAACCTCAAAGGAATTGACGGGGGGCCCGCAAAAGCAGCGGAGCGTGTGGTTTAA
	DHE (stf).seq		AAGGCTAAACCTCAAAGGAATTGACGGGGGGCCCGCAAAAGCAGCGGAGCGTGTGGTTTAA
	DHE. (pl).seq		AAGGCTAAACCTCAAAGGAATTGACGGGGGGCCCTTAAAGCAGCGGAGCGTGTGGTTTAA
	DHE. (dll).seq		AAGGCTAAACCTCAAAGGAATTGACGGGGGGCCCGCAAAAGCAGCGGAGCGTGTGGTTTAA
	DHE. (dab).seq		AAGGCTAAACCTCAAAGGAATTGACGGGGGGCCCGCAAAAGCAGCGGAGCGTGTGGTTTAA
	DHE. (pin).seq		AAGGCTAAACCTCAAAGGAATTGACGGGGGGCCCGCAAAAGCAGCGGAGCGTGTGGTTTAA
901	DHE. (cornell)	960	TTCGATGCTACACGAAGAAC.TTACCAAGATTTGACATGTCATGAAGTAGTGAAACCCGAAAG
	DHE (stf).seq		TTCGATGCTACACGAAGAACCCTTACCAAGATTTGACATGTCATGAAGTAGTGAAACCCGAAAG
	DHE. (pl).seq		TTCGATGCTACACGAAGAACCCTTACCAAGATTTGACATGTCATGAAGTAGTGAAACCCGAAAG
	DHE. (dll).seq		TTCGATGCTACACGAAGAACCCTTACCAAGATTTGACATGTCATGAAGTAGTGAAACCCGAAAG
	DHE. (dab).seq		TTCGATGCTACACGAAGAACCCTTACCAAGATTTGACATGTCATGAAGTAGTGAAACCCGAAAG
	DHE. (pin).seq		TTCGATGCTACACGAAGAACCCTTACCAAGATTTGACATGTCATGAAGTAGTGAAACCCGAAAG
961	DHE. (cornell)	1020	GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCAGCTCGTG
	DHE (stf).seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCAGCTCGTG
	DHE. (pl).seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCAGCTCGTG
	DHE. (dll).seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCAGCTCGTG
	DHE. (dab).seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCAGCTCGTG
	DHE. (pin).seq		GGAAACGACCTGTTAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCAGCTCGTG

FIG. 1F

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1021	DHE. (cornell)	CCGTGAGGTGTTGGTTAAGTCTGCAACGAGCGCAACC.TTGTGCTAGTTAAATTTTC	1080
	DHE (stf).seq	CCGTGAGGTGTTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTAAATTTTC	
	DHE. (pl).seq	CCGTGAGGTGTTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTAAATTTTC	
	DHE. (dll).seq	CCGTGAGGTGTTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTAAATTTTC	
	DHE. (dab).seq	CCGTGAGGTGTTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTAAATTTTC	
	DHE. (pin).seq	CCGTGAGGTGTTGGTTAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTAAATTTTC	
1081	DHE. (cornell)	TAGCGAGACTAGCGAGACTGCCCCCGGAAACGGGGAGGAAGGTGGGGATGACGTCAAGTC	1140
	DHE (stf).seq	TAGCGAG.....ACTGCCCCCGGAAACGGGGAGGAAGGTGGGGATGACGTCAAGTC	
	DHE. (pl).seq	TAGCGAG.....ACTGCCCCCGGAAACGGGGAGGAAGGTGGGGATGACGTCAAGTC	
	DHE. (dll).seq	TAGCGAG.....ACTGCCCCCGGAAACGGGGAGGAAGGTGGGGATGACGTCAAGTC	
	DHE. (dab).seq	TAGCGAG.....ACTGCCCCCGGAAACGGGGAGGAAGGTGGGGATGACGTCAAGTC	
	DHE. (pin).seq	TAGCGAG.....ACTGCCCCCGGAAACGGGGAGGAAGGTGGGGATGACGTCAAGTC	
1141	DHE. (cornell)	AGCATGGCCCTTTATATCTTGGGCTACACACACGCTACAA TGGA CAGAACAA TAGGTTGCA	1200
	DHE (stf).seq	AGCATGGCCCTTTATATCTTGGGCTACACACACGCTACAA TGGA CAGAACAA TAGGTTGCA	
	DHE. (pl).seq	AGCATGGCCCTTTATATCTTGGGCTACACACACGCTACAA TGGA CAGAACAA TAGGTTGCA	
	DHE. (dll).seq	AGCATGGCCCTTTATATCTTGGGCTACACACACGCTACAA TGGA CAGAACAA TAGGTTGCA	
	DHE. (dab).seq	AGCATGGCCCTTTATATCTTGGGCTACACACACGCTACAA TGGA CAGAACAA TAGGTTGCA	
	DHE. (pin).seq	AGCATGGCCCTTTATATCTTGGGCTACACACACGCTACAA TGGA CAGAACAA TAGGTTGCA	

FIG. 10

APPROVED	O.G. FIG.	
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1201
 DHE. (cornell) ACAGTGTGAACTGGAGCTAATCCCAAGCTGTCTCAGTTCGGATTGCAGGCTGAAACC
 DHE. (stf).seq ACAGTGTGAACTGGAGCTAATCCTCAAAGCTGTCTCAGTTCGGATTGCAGGCTGAAACC
 DHE. (pl).seq ACAGTGTGAACTGGAGCTAATCCCAAGCTGTCTCAGTTCGGATTGCAGGCTGAAACC
 DHE. (dll).seq ACAGTGTGAACTGGAGCTAATCCTCAAAGCTGTCTCAGTTCGGATTGCAGGCTGAAACC
 DHE. (dab).seq ACAGTGTGAACTGGAGCTAATCCCAAGCTGTCTCAGTTCGGATTGCAGGCTGAAACC
 DHE. (pin).seq ACAGTGTGAACTGGAGCTAATCCCAAGCTGTCTCAGTTCGGATTGCAGGCTGAAACC

1260

1261
 DHE. (cornell) CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT
 DHE. (stf).seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT
 DHE. (pl).seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT
 DHE. (dll).seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT
 DHE. (dab).seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT
 DHE. (pin).seq CGCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGTGCGGTGAATACGTT

1320

1321
 DHE. (cornell) CTCGGGCCCTTGTAACACACCGCCCGTCA CGTCATGANAGCCGGTAAACACTTGAAGTCGATG
 DHE. (stf).seq CTCGGGCCCTTGTAACACACCGCCCGTCA CGTCATGANAGCCGGTAAACACTTGAAGTCGATG
 DHE. (pl).seq CTCGGGCCCTTGTAACACACCGCCCGTCA CGTCATGANAGCCGGTAAACACTTGAAGTCGATG
 DHE. (dll).seq CTCGGGCCCTTGTAACACACCGCCCGTCA CGTCATGANAGCCGGTAAACACTTGAAGTCGATG
 DHE. (dab).seq CTCGGGCCCTTGTAACACACCGCCCGTCA CGTCATGANAGCCGGTAAACACTTGAAGTCGATG
 DHE. (pin).seq CTCGGGCCCTTGTAACACACCGCCCGTCA CGTCATGANAGCCGGTAAACACTTGAAGTCGATG

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FIG. 1H

APPROVED	O.G. FIG.	
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	1381		1440
DHE. (cornell)	TGCCAACCGCAAGGAGGCAAGTCCGCCGAGGGTGGGACTGGTAATTGGGACGAAGTCGTAAC		
DHE (stf).seq	TGCCCAACC.....		
DHE. (pl).seq	TGCCCAACC.....		
DHE. (dll).seq	TGCCCAACC.....		
DHE. (dab).seq	TGCCCAACC.....		
DHE. (pin).seq	TGCCCAACC.....		
	1441	1446	
DHE. (cornell)	AAGGTA	(SEQ ID NO:7)	
DHE (stf).seq	(SEQ ID NO:3)	
DHE. (pl).seq	(SEQ ID NO:2)	
DHE. (dll).seq	(SEQ ID NO:6)	
DHE. (dab).seq	(SEQ ID NO:4)	
DHE. (pin).seq	(SEQ ID NO:5)	

FIG. 1I

APPROVED	O.G. FIG.	
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<p>121</p> <p>E. coli. 16S seq DHE. (cornell) DHE. (stf). seq DHE. (pl). seq DHE. (dab). seq DHE. (pin). seq DHE. (dll). seq</p>	<p>179</p> <p>TGCTCTGGGAAAC.TGCCTGATGGAGGGGGATAACTACTGGAACCGTAGCTAATAACCGCA CGCGTAAGTAACCTA CCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATAACCGCA CGCGTAAGTAACCTA CCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATAACCGCA CGCGTAAGTAACCTA CCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATAACCGCA CGCGTAAGTAACCTA CCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATAACCGCA CGCGTAAGTAACCTA CCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATAACCGCA CGCGTAAGTAACCTA CCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATAACCGCA CGCGTAAGTAACCTA CCTCTAAGTGGGGATAGCTTCGGGAAACTGAAGGTAATAACCGCA</p>	<p>180</p> <p>E. coli. 16S seq DHE. (cornell) DHE. (stf). seq DHE. (pl). seq DHE. (dab). seq DHE. (pin). seq DHE. (dll). seq</p>	<p>236</p> <p>TAACTCGCAAGACCAAAGAGGGGGACCTTCGGGCCCTCTTGCCATCGGATGTG...CCCA TGTGATGGGCTGAC.ATAAGTCGGTTCATTAAAGCCGCAAGGTGCTTGGTGAGGGGCTTG TGTGGTGGGCCGAC.ATAAGTTGGTTCACCTAAAGCCGTAAGGTGCTTGGTGAGGGGCTTG TGTGATGGGCTGAC.ATAAGTCGGTTCATTAAAGCCGCAAGGTGCTTGGTGAGGGGCTTG TGTGTGGGGCCGAC.ATATGTTGGTTCACCTAAAGCCGTAAGGCGCTTGGTGAGGGGCTTG TGTGGTGGGCCGAC.ATATGTTGGTTCACCTAAAGCCGTAAGGCGCTTGGTGAGGGGCTTG TGTGGTGGGCCGAC.ATAAGTTGGTTCACCTAAAGCCGTAAGGCGCTTGGTGAGGGGCTTG</p>	<p>237</p> <p>E. coli. 16S seq DHE. (cornell) DHE. (stf). seq DHE. (pl). seq DHE. (dab). seq DHE. (pin). seq DHE. (dll). seq</p>	<p>295</p> <p>GATGGGATTAGCTAGTAGTGGGGTAACGGCTCACCTAGGCGACGATCCCTAGCT.GGTC CGTCCGATTAGCTAGTTGGTGGGGTAATGCTCTACCAAGGCTTCGATCGGTAGCT.GGTC CGTCCGATTAGCTAGTTGGTGGGGTAACGGCTCACCAAGGCTTCGATCGGTAGCTTGGTC CGTCCGATTAGCTAGTTGGTGGGGTAATGGCCCTACCAAGGCTTCGATCGGTAGCT.GGTC CGTCCGATTAGCTAGTTGGTGGGGTAATGGCCCTACCAAGGCTTCGATCGGTAGCT.GGTC CGTCCGATTAGCTAGTTGGTGGGGTAATGGCCCTACCAAGGCTTCGATCGGTAGCT.GGTC CGTCCGATTAGCTAGTTGGTGGGGTAATGGCCCTACCAAGGCTTCGATCGGTAGCT.GGTC CGTCCGATTAGCTAGTTGGTGGGGTAACGGCCCTACCAAGGCTTCGATCGGTAGCT.GGTC</p>
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FIG. 2B

APPROVED	O.G. FIG.	
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355
TGAGAGGATGACCGCAGCCACACTGGAACTGAGACACGGTCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
TGAGAGGATGATCAGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGGGAGGCAGC
356
AGTGGGGAATATTGCAATGGGCGCAAGCCTGATGAGCCATGCCGCGTGTATGAAGAA
AGCAAGGAATCTTGGGCAATGGGCGAAGCCTGACCCAGCAACGCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAGCCTGACCCAGCAACGCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAGCCTGACCCAGCAACGCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAGCCTGACCCAGCAACGCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAGCCTGACCCAGCAACGCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAGCCTGACCCAGCAACGCCGCGTGAGGGATGAA
AGCAAGGAATCTTGGGCAATGGGCGAAGCCTGACCCAGCAACGCCGCGTGAGGGATGAA
415
GGCCTTCGGGTTGTAAAGTACTTTCAGCGGGGAGGAAGGAGTAAAGTTAATACCTTTGC
GGCTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCATAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCATAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCATAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAA.....TAAT.....
416
E.coli.16S seq
DHE. (cornell)
DHE. (stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
E.coli.16S seq
DHE. (cornell)
DHE. (stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
416
GGCCTTCGGGTTGTAAAGTACTTTCAGCGGGGAGGAAGGAGTAAAGTTAATACCTTTGC
GGCTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCATAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCATAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCATAGGGAAGAA.....TAAT.....
GGCTTCGGGTTGTAAACCTCTTTTCACAGGGAAGAA.....TAAT.....
4175
E.coli.16S seq
DHE. (cornell)
DHE. (stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
E.coli.16S seq
DHE. (cornell)
DHE. (stf).seq
DHE. (pl).seq
DHE. (dab).seq
DHE. (pin).seq
DHE. (dll).seq
```

FIG. 2C

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
 Appl. No.: 09/548,998
 Title: Nucleic Acid Fragments for the
 Identification of Dechlorinating Bacteria
 Inventor: Ebersole et al.

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535

476
 E.coli.16S seq
 DHE. (cornell)
 DHE. (stf).seq
 DHE. (pl).seq
 DHE. (dab).seq
 DHE. (pin).seq
 DHE. (dll).seq
 TCATTGACGTTACCCGAGAAAGACACGGCTAACTCGTGCCAGCAGCCGCGGTAATA
GACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATA
GACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATA
GACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATA
GACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATA
GACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATA
GACGGTACCTGTGGAATAAGCTTCGGCTAACTACGTGCCAGCAGCCGCGGTAATA

594

536
 E.coli.16S seq
 DHE. (cornell)
 DHE. (stf).seq
 DHE. (pl).seq
 DHE. (dab).seq
 DHE. (pin).seq
 DHE. (dll).seq
 CGGAGGGT.GCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCACGAGCGGTTGTT
 CGTAGGGAAGCAAGCGTTATCCGGATTATTGGGCGTAAAGTGAGCGTAGGTGGTCTTTC
 CGTAGG.AAGCAAGCGTTATCCGGATTATTGGGCGTAAAGTGAGCGTAGGTGGTCTTTC
 CGTAGG.AAGCAAGCGTTATCCGGATTATTGGGCGTAAAGTGAGCGTAGGTGGTCTTTC
 CGTAGG.AAGCAAGCGTTATCCGGATTATTGGGCGTAAAGTGAGCGTAGGTGGTCTTTC
 CGTAGG.AAGCAAGCGTTATCCGGATTATTGGGCGTAAAGTGAGCGTAGGTGGTCTTTC
 CGTAGG.AAGCAAGCGTTATCCGGATTATTGGGCGTAAAGTGAGCGTAGGTGGTCTTTC

654

595
 E.coli.16S seq
 DHE. (cornell)
 DHE. (stf).seq
 DHE. (pl).seq
 DHE. (dab).seq
 DHE. (pin).seq
 DHE. (dll).seq
 AAGTCAGATGTGAAATCCCGGGCTCAACCTGGGAACGTGCATCTGATACTGGCAAGCTTG
 AAGTTGGATGTGAAATTTCCCGGCTTAACCGGACGTGTCAATCAATACTGTGGACTAG
 AAGTTGGATGTGAAATTTCCCGGCTTAACCGGACGTGTCAATCAATACTGTGGACTAG
 AAGTTGGATGTGAAATTTCCCGGCTTAACCGGACGTGTCAATCAATACTGTGGACTAG
 AAGTTGGATGTGAAATTTCCCGGCTTAACCGGACGTGTCAATCAATACTGTGGACTAG
 AAGTTGGATGTGAAATTTCCCGGCTTAACCGGACGTGTCAATCAATACTGTGGACTAG
 AAGTTGGATGTGAAATTTCCCGGCTTAACCGGACGTGTCAATCAATACTGTGGACTAG
 AAGTTGGATGTGAAATTTCCCGGCTTAACCGGACGTGTCAATCAATACTGTGGACTAG

FIG. 2D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
Appl. No.: 09/548,998
Title: Nucleic Acid Fragments for the
Identification of Dechlorinating Bacteria
Inventor: Ebersole et al.

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655	714
E.coli.16S seq	AGTCTCGTAGAGGGGTAGAAATCCAGGTGTAGCGGTGAAATCGGTAGAGATCTGGAGG
DHE. (cornell)	AGTACAGCAGGAGAGAAAACGGAATTCCTCGGTGTAGTGGTAAAATGCGTAGATATCGGGAGG
DHE. (Stf) .seq	AGTACAGCAGGAGAGAAAACGGAATTCCTCGGTGTAGTGGTAAAATGCGTAGATATCGGGAGG
DHE. (pl) .seq	AGTACAGCAGGAGAGAAAACGGAATTCCTCGGTGTAGTGGTAAAATGCGTAGATATCGGGAGG
DHE. (dab) .seq	AGTACAGCAGGAGAGAAAACGGAATTCCTCGGTGTAGTGGTAAAATGCGTAGATATCGGGAGG
DHE. (pin) .seq	AGTACAGCAGGAGAGAAAACGGAATTCCTCGGTGTAGTGGTAAAATGCGTAGATATCGGGAGG
DHE. (dll) .seq	AGTACAGCAGGAGAGAAAACGGAATTCCTCGGTGTAGTGGTAAAATGCGTAGATATCGGGAGG
715	774
E.coli.16S seq	AATACCGGTGGCGAAGGGGGCCCCCTGGACGAAGACTGACGCTCAGGTGCGAAAGCGTGG
DHE. (cornell)	AACACCCAGAGGCGAAGGGGGTTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (Stf) .seq	AACACCCAGAGGCGAAGGGGGTTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (pl) .seq	AACACCCAGAGGCGAAGGGGGTTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (dab) .seq	AACACCCAGAGGCGAAGGGGGTTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (pin) .seq	AACACCCAGAGGCGAAGGGGGTTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
DHE. (dll) .seq	AACACCCAGAGGCGAAGGGGGTTTTCTAGGTTGTCACTGACACTGAGGCTCGAAAGCGTGG
755	834
E.coli.16S seq	GGAGCAAAACAGGATTAGATACCTGGTAGTCCACGCCGTAAACGATGTGACTTGGAGGT
DHE. (cornell)	GGAGCGAAACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (Stf) .seq	GGAGCGAAACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (pl) .seq	GGAGCGAAACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (dab) .seq	GGAGCGAAACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (pin) .seq	GGAGCGAAACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA
DHE. (dll) .seq	GGAGCGAAACAGAAATTAGATACTCTGGTAGTCCACGCCCTTAAACTATGGACACTAGGTATA

FIG. 2E

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
Appl. No.: 09/548,998
Title: Nucleic Acid Fragments for the Identification
of Dechlorinating Bacteria
Inventor: Ebersole et al.

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835	E.coli.16S seq	893	TGTGCCCTTGAGCGTGGCTT.CCGAGCTAACGCTTAAGTCGACCGCCTGGGGAGTAC
	DHE.(cornell)		GGGAGTATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGGAGTAC
	DHE.(stf).seq		GGGAGTATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGGAGTAC
	DHE.(pl).seq		GGGAGTATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGGAGTAC
	DHE.(dab).seq		GGGAGTATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGGAGTAC
	DHE.(pin).seq		GGGAGTATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGGAGTAC
	DHE.(dll).seq		GGGAGTATCGACCCCTCTGTGCCGAAGCTAACGCTTTAAGTGTCCCGCCTGGGGAGTAC
901	E.coli.16S seq	953	GGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCCCCGACAAAGCGGTGGAGCATGTG
	DHE.(cornell)		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGCAGCGGAGCGTGTG
	DHE.(stf).seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGCAGCGGAGCGTGTG
	DHE.(pl).seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGCAGCGGAGCGTGTG
	DHE.(dab).seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGCAGCGGAGCGTGTG
	DHE.(pin).seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGCAGCGGAGCGTGTG
	DHE.(dll).seq		GGTCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGCAGCGGAGCGTGTG
954	E.coli.16S seq	1011	GTTTAATTCGATGCAACGCGAAGAACCTTACCTGGTCTTGACATCCACGGA..AGTTTTC
	DHE.(stf).seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCGATGAAGTAGTGAAC
	DHE.(pl).seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCGATGAAGTAGTGAAC
	DHE.(dab).seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCGATGAAGTAGTGAAC
	DHE.(pin).seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCGATGAAGTAGTGAAC
	DHE.(dll).seq		GTTTAATTCGATGCTACACGAAGAACCTTACCAAGATTTGACATGCGATGAAGTAGTGAAC

FIG. 2F

APPROVED	O.G. FIG.	
BY .	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
 Appl. No.: 09/548,998
 Title: Nucleic Acid Fragments for the
 Identification of Dechlorinating Bacteria
 Inventor: Ebersole et al.

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<p>E.coli.16S seq DHE. (cornell) DHE. (stf).seq DHE. (pl).seq DHE. (dab).seq DHE. (pin).seq DHE. (dll).seq</p>	<p>1012 AGAGATGAGAATGTGCTTCGGG..AACCGTGAG.ACAGGTGCTGCATGGCTGTCGTGTCAG CGAAAGGGGAAACGACCTGTAAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCGTGTCAG CGAAAGGGGAAACGACCTGTAAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCGTGTCAG CGAAAGGGGAAACGACCTGTAAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCGTGTCAG TGAAGGGGAAACGACCTGTAAAGTCAGGAACTTGACAGGTGCTGCATGGCTGTCGTGTCAG TGAAGGGGAAACGACCTGTAAAGTCAGGAACTTGACAGGTGCTGCATGGCTGTCGTGTCAG CGAAAGGGGAAACGACCTGTAAAGTCAGGAGTTTGACAGGTGCTGCATGGCTGTCGTGTCAG</p>	<p>1068</p>
<p>E.coli.16S seq DHE. (cornell) DHE. (stf).seq DHE. (pl).seq DHE. (dab).seq DHE. (pin).seq DHE. (dll).seq</p>	<p>1069 CTCGTGTTGTGAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTATCCTTTGTTGC CTCGTGCCGTGAGGTGTTGGGTTAAGTCTGCAACGAGCGCAACC.TTGTGCTAGTTA. CTCGTGCCGTGAGGTGTTGGTAAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA. CTCGTGCCGTGAGGTGTTGGTAAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA. CTCGTGCCGTGAGGTGTTGGTAAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA. CTCGTGCCGTGAGGTGTTGGTAAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA. CTCGTGCCGTGAGGTGTTGGTAAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA. CTCGTGCCGTGAGGTGTTGGTAAAGTCTGCAACGAGCGCAACCCCTTGTGCTAGTTA.</p>	<p>1128</p>
<p>E.coli.16S seq DHE. (cornell) DHE. (stf).seq DHE. (pl).seq DHE. (dab).seq DHE. (pin).seq DHE. (dll).seq</p>	<p>1129 CAGCGGTCCGGCCGGAACTCAAAGGAGACTGCCAGTGATAAACTGG.AGGAAGGTGGGG .AATTTTCTAGC.GAG.ACT..AGCGAGACTGCCC.CGCGAAACGGGGAGGAAGGTGGGG .AATTTTCTAGC.GAG.....ACTGCCC.CGCGAAACGGGGAGGAAGGTGGGG .AATTTTCTAGC.GAG.....ACTGCCC.CGCGAAACGGGGAGGAAGGTGGGG .AATTTTCTAGC.GAG.....ACTGCCC.CGCGAAACGGGGAGGAAGGTGGGG .AATTTTCTAGC.GAG.....ACTGCCC.CGCGAAACGGGGAGGAAGGTGGGG .AATTTTCTAGC.GAG.....ACTGCCC.CGCGAAACGGGGAGGAAGGTGGGG</p>	<p>1187</p>

FIG. 2G

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1188      1247
E.coli.16S seq      ATGACGTC AAGTCATCATG GCGCCTTACGACCAGGGCTACACACGTGCTACAATGGCGCAT
DHE. (cornell)      ATGACGTC AAGTCAGCATGGCCTTTATATCTTGGGCTACACACACGCTACAATGGACAGA
DHE. (Stf).seq      ATGACGTC AAGTCAGCATGGCCTTTATATCTTGGGCTACACACACGCTACAATGGACAGA
DHE. (pl).seq       ATGACGTC AAGTCAGCATGGCCTTTATATCTTGGGCTACACACACGCTACAATGGACAGA
DHE. (dab).seq      ATGACGTC AAGTCAGCATGGCCTTTATATCTTGGGCTACACACACGCTACAATGGACAGA
DHE. (pin).seq      ATGACGTC AAGTCAGCATGGCCTTTATATCTTGGGCTACACACACGCTACAATGGACAGA
DHE. (dll).seq      ATGACGTC AAGTCAGCATGGCCTTTATATCTTGGGCTACACACACGCTACAATGGACAGA

1248      1307
E.coli.16S seq      ACAAGA GAGAGCGACCTCGCGAGAGCAAGCGGACCTCATAAAGTCGTCGTAGTCGGGAT
DHE. (cornell)      ACAATAGG TTGCAACAGTGTGA ACTGGAGCTAATCCC. CAAAGCTGTCTCAGTTCGGAT
DHE. (Stf).seq      ACAATAGG TTGCAACAGTGTGA ACTGGAGCTAATCCT. CAAAGCTGTCTCAGTTCGGAT
DHE. (pl).seq       ACAATAGG TTGCAACAGTGTGA ACTGGAGCTAATCCC. CAAAGCTGTCTCAGTTCGGAT
DHE. (dab).seq      ACAATAGG TTGCAACAGTGTGA ACTGGAGCTAATCCC. CAAAGCTGTCTCAGTTCGGAT
DHE. (pin).seq      ACAATAGG TTGCAACAGTGTGA ACTGGAGCTAATCCC. CAAAGCTGTCTCAGTTCGGAT
DHE. (dll).seq      ACAATAGG TTGCAACAGTGTGA ACTGGAGCTAATCCT. CAAAGCTGTCTCAGTTCGGAT

1308      1367
E.coli.16S seq      TGGAGTCTGCAACTCGACTCCATGGAAGTCGGAATCGCTAGTAATCGTGATCAGAAATGCC
DHE. (cornell)      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
DHE. (Stf).seq      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
DHE. (pl).seq       TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
DHE. (dab).seq      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCATGGT
DHE. (pin).seq      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCATGGT
DHE. (dll).seq      TGCAGGCTGAAACCCGCCCTGCATGAAGTTGGAGTTGCTAGTAACCGCATATCAGCAAGGT
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FIG. 2H

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
Appl. No.: 09/548,998
Title: Nucleic Acid Fragments for the
Identification of Dechlorinating Bacteria
Inventor: Ebersole et al.

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1368	1437
E.coli.16S seq	ACGGTGAATACGTTCCCGGCCCTTGACACACCGCCCGTCACACCATGGGAGTGGGTTGC
DHE. (cornell)	GCGGTGAATACGTTCTCGGGCCCTTGACACACCGCCCGTCACGTCAATGANAGCCGGTAAC
DHE. (Stf).seq	GCGGTGAATACGTTCTCGGGCCCTTGACACACCGCCCGTCACGTCAATGAAAGCCGGTAAC
DHE. (pl).seq	GCGGTGAATACGTTCTCGGGCCCTTGACACACCGCCCGTCACGTCAATGAAAGCCGGTAAC
DHE. (dab).seq	GCGGTGAATACGTTCTCGGGCCCTTGACACACCGCCCGTCACGTCAATGAAAGCCGGTAAC
DHE. (pin).seq	GCGGTGAATACGTTCTCGGGCCCTTGACACACCGCCCGTCACGTCAATGAAAGCCGGTAAC
DHE. (dll).seq	GCGGTGAATACGTTCTCGGGCCCTTGACACACCGCCCGTCACGTCAATGAAAGCCGGTAAC
1438	1487
E.coli.16S seq	AAAAGAAGTAGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTTGTGATTCATGACTGG
DHE. (cornell)	ACTTGAAGTCGATGTGCCAACCCGCAAGGAGGCAGTCGCCGAGGGTGGGACTGGTAATTGG
DHE. (Stf).seq	ACTTGAAGTCGATGTGCCAACCC
DHE. (pl).seq	ACTTGAAGTCGATGTGCCAACCC
DHE. (dab).seq	ACTTGAAGTCGATGTGCCAACCC
DHE. (pin).seq	ACTTGAAGTCGATGTGCCAACCC
DHE. (dll).seq	ACTTGAAGTCGATGTGCCAACCC
1488	1542
E.coli.16S seq	GGTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGGTTGGATCACCTCCCTTA
DHE. (cornell)	GACGAAGTCGTAACAAGGTA
DHE. (Stf).seq	(SEQ ID NO:33)
DHE. (pl).seq	(SEQ ID NO:7)
DHE. (dab).seq	(SEQ ID NO:3)
DHE. (pin).seq	(SEQ ID NO:2)
DHE. (dll).seq	(SEQ ID NO:4)
	(SEQ ID NO:5)
	(SEQ ID NO:6)

FIG. 21

APPROVED	O.G. FIG.	
-BY	CLASS	SUBCLASS
DRAFTSMAN		

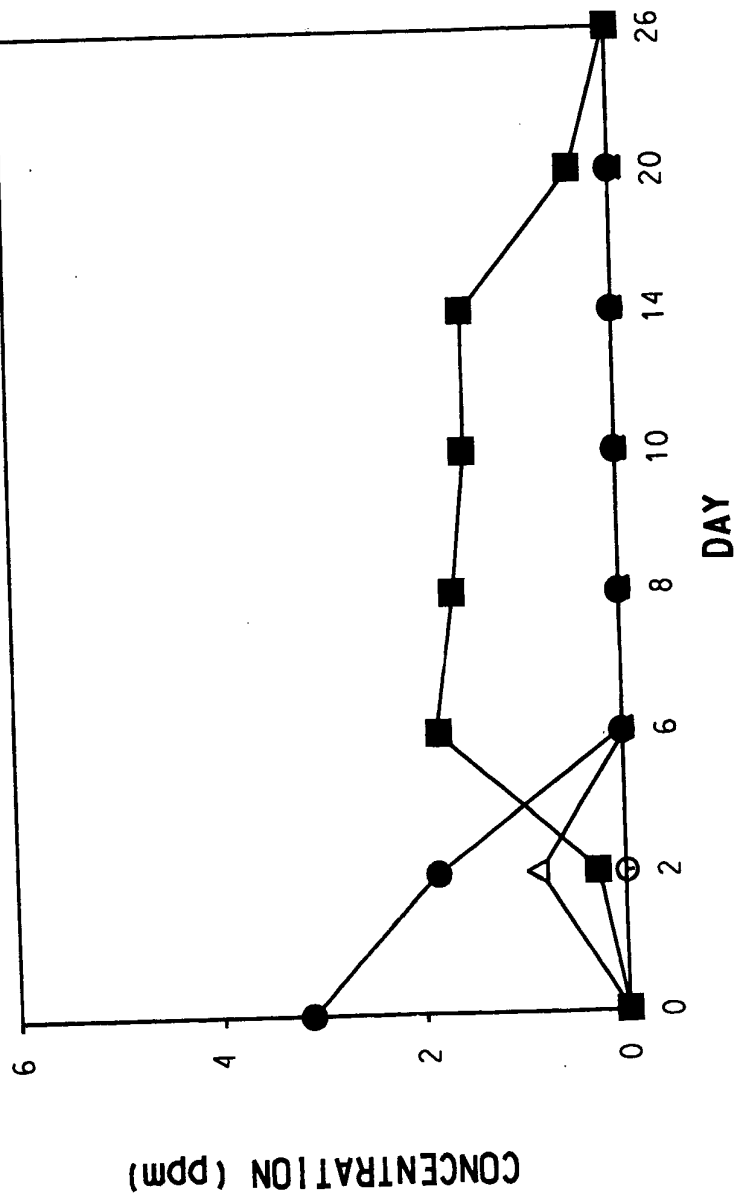
Docket No.: BC1002 US NA
 Appl. No.: 09/548,998
 Title: Nucleic Acid Fragments for the Identification
 of Dechlorinating Bacteria
 Inventor: Ebersole et al.

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 TCE
 DCE
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FIG. 3



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Docket No.: BC1002 US NA
 Appl. No.: 09/548,998
 Title: Nucleic Acid Fragments for the
 Identification of Dechlorinating Bacteria
 Inventor: Ebersole et al.

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FIG. 4

